# PATENT COOPERATION TREATY

# **PCT**

# TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 0000055039	FOR FURTHER ACTION	See Form PCT/IPEA/416							
International application No.	International filing date (day/month/year)	Priority date (day/month/year)							
PCT/EP2004/012335	30.10.2004	03.11.2003							
International Patent Classification (IPC) or nati	ional classification and IPC								
C08G18/10, C08G18/08, C08G18/24, C08G18/22									
Applicant									
BASE ARTIENGESELLSCH	BASF AKTIENGESELLSCHAFT								
	1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.								
2. This REPORT consists of a total of	5 sheets, includi	ng this cover sheet.							
3. This report is also accompanied by A	NNEXES, comprising:								
a. (sent to the applicant and	to the International Bureau) a total of	sheets, as follows:							
		amended and are the basis for this report and/or							
sheets containing re Instructions).	ctifications authorized by this Authority (see R	ule 70.16 and Section 607 of the Administrative							
sheets which supers	ede earlier sheets, but which this Authority co	nsiders contain an amendment that goes beyond							
the disclosure in the Box.	e international application as filed, as indicate	d in item 4 of Box No. I and the Supplemental							
b. (sent to the International	Bureau only) a total of (indicate type and numb	er of electronic carrier(s))							
(sem to the factorial	Dividuo one, a total of (mareure type and name								
related thereto, in compute	, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see								
Section 802 of the Adminis		carries and second of the seco							
4. This report contains indications relati	ing to the following items:								
Box No. I Basis of the	report								
Box No. II Priority									
Box No. III Non-establi	shment of opinion with regard to novelty, inver	ntive step and industrial applicability							
Box No. IV Lack of uni	ty of invention								
BON TIO. I	Box No. V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement								
Box No. VI Certain doc	cuments cited								
Box No. VII Certain def	ts in the international application								
Box No. VIII Certain obs	Box No. VIII Certain observations on the international application								
Date of submission of the demand	Date of completion of t	his report							
2 me definite	Date of completion of t								
Name and mailing address of the IPEA/EP	Authorized officer								
Facsimile No.	Telephone No.								

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/012335

Box	k No. I	Basis of the report				
1.		h regard to the language, this report is based on the internation cated under this item.	nal application in the language in which it was filed, unless otherwise			
	This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:  international search (Rule 12.3 and 23.1(b))  publication of the international application (Rule 12.4)  international preliminary examination (Rule 55.2 and/or 55.3)					
2.	rece	h regard to the <b>elements</b> of the international application, this report is based on (replacement sheets which have been furnished to the eiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to report):  the international application as originally filed/furnished the description:				
			as originally filed/furnished received by this Authority on			
			received by this Authority on			
	$\boxtimes$	the claims:				
		nos. 1–17	as originally filed/furnished			
			as amended (together with any statement) under Article 19			
			received by this Authority on			
			received by this Authority on			
	$\boxtimes$	the drawings:	· · · · · · · · · · · · · · · · · · ·			
		sheets 1	as originally filed/furnished			
		sheets*	received by this Authority on			
			received by this Authority on			
		a sequence listing and/or any related table(s) – see Supplen				
3.		The amendments have resulted in the cancellation of:				
		the description, pages				
		the claims, nos.				
		the drawings, sheets/figs				
		the sequence listing (specify):				
4.			ments annexed to this report and listed below had not been made, since			
		the description, pages				
		the claims, nos.				
		the drawings, sheets/figs				
		the sequence listing (specify):				
		any table(s) related to sequence listing (specify):				
*	If ite	em 4 applies, some or all of those sheets may be marked "sup	erseded."			

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
1.	Statement			
	Novelty (N)	Claims	1-15, 17	YES
		Claims	16	_ NO
	Inventive step (IS)	Claims	1-15, 17	YES
		Claims	16	_ NO
	Industrial applicability (IA)	Claims	1-17	YES
		Claims		_ NO

2. Citations and explanations (Rule 70.7)

Reference is made to the following document:

- D1: EP-A-1 253 159 (cited in the application).
- 1. Novelty (PCT Article 33(2)) and inventive step (PCT Article 33(3))

Document D1 discloses prepolymers containing isocynanate groups with a residual diisocyanate content smaller than 0.1 % by weight, which are based on 2,4-TDI and/or 2,6-TDI as asymmetrical diisocyanate and a polyetherpolyol, and contain  $\geq$  80 % by weight of ABA structures having a perfect prepolymer structure.

(D1: the NCO prepolymer contains 80 % by weight perfect prepolymer structures, page 3, lines 13-21 and lines 47-58; prepolymer on the basis of 2,4-TDI and/or 2,6-TDI and polyetherpolyols with a residual diisocyanate content of < 0.1 % by weight, page 4, lines 15-24 and Table 1, prepolymer 5).

Consequently, the subject matter of product claim 16, which relates to prepolymers containing isocyanate

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

groups, is anticipated by document D1 and hence the application does not satisfy the requirement of PCT Article 33(2).

The applicant is therefore invited to delimit the above claim with respect to document D1. Should it not be possible to do so, he is requested to demonstrate that the feature used to substantiate novelty, which is not anticipated by the prior art, is not obvious and directly connected to the problem to be solved.

Only if the above conditions are met can this feature contribute to an inventive step relative to document D1, in line with the requirements of PCT Article 33(2) and (3).

### 2. Industrial applicability (PCT Article 33(4))

The application relates to isocyanate-containing prepolymers for the production of polyurethane and is therefore industrially applicable.

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#### Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

## Clarity (PCT Article 6)

1. In the interest of clarity (PCT Article 6), the features in claim 13 introduced by "such as" should be deleted since they do not restrict the scope of the claim. These features could be made the subject of dependent claims.

Regarding claim  ${\bf 13}$  it is further unclear how the group  $R_2$  in the compound formula (I) of claim  ${\bf 13}$  can refer to "nothing", since in that case the result would be a triple-bonded, that is unstable, C atom.

2. As regards claim 14, it is unclear to which C atom in formula (I) the carbon atom (C1) of the cited functionalized organic carboxylic acids should correspond.